IU Center Addresses the Human Dimensions of Global Environmental Change

Indiana University's Anthropological Center for Training and Research on Global Environmental Change (ACT) is a pioneer among global environmental research centers. It takes to heart the dictum to "think globally, act locally" by focusing on the human dimensions of global environmental change. ACT's mission is to counterbalance the earth science or atmospheric science bias of most global environmental centers by examining how particular local populations manage resources and how those human activities may be monitored, using remote sensing technologies followed by periods of intensive field study, hence the term "anthropological" in the Center's name.

ACT was established in 1992 at the Bloomington campus by Professor Emilio Moran, who has joint appointments in the Department of Anthropology and the School of Public and Environmental Affairs (SPEA), with funds from the National Science Foundation. As a resource center, it provides collaborative research and training facilities to IU graduate students, faculty, and visiting researchers from the social, biological, and natural sciences who seek an interdisciplinary, inter-area approach to analyzing the impact of highly variable human activities on local ecosystems, and who have an interest in shaping alternative policies for the use, conservation, and restoration of these systems at regional, national, and global levels.

Because ACT gives high priority to environmentally critical areas outside the U.S., its current research concentrates on the Brazilian Amazon and the tropical forests of southeastern Mexico. Using a systematic sampling approach to image analysis data supplied by Landsat, for example, ACT researchers can monitor rates of change in particular areas to determine if specific land-use strategies by people on the ground are accelerating or retarding forest succession. Over the past few years, Moran and his teams have conducted a number of field investigations in these two regions.

In January, Moran was awarded a major training grant from the Tinker Foundation to support one of the Center's projects, "Strengthening Capacity for Environmental Analysis and Protection in Latin America." This grant will enable a group of Brazilian and Mexican scholars to have access to the environmental monitoring techniques available at the Center, and to help them link the application of these tools to policy interventions for protecting species of the tropical moist forests in their countries.

ACT's well-equipped facilities, housed in the same building as the departments of Anthropology and Geography, include workstation clusters in each of three major computer platforms (DOS, Macintosh, and UNIX) to accommodate the variable needs of scholars, as well as a digitizing table, map collections, consultation library, and seminar room. ACT training coordinator Denis Mudderman, a geographer skilled in geographic information systems (GIS), coordinates projects and activities for visitors and all members of the research teams. As Director Moran points out, the capabilities of the highly sophisticated techniques of remote sensing can yield important information to aid the efforts of conservationists and others trying to address the pressing human problems of loss of biodiversity, habitat destruction, and the monitoring of change processes. For further information, contact the Director at (812) 855-6181.